

PRODUCT DESCRIPTION

SANITILE 5209 is a ¼" trowelable novolac epoxy heavy-duty lining for horizontal surfaces requiring optimal traffic bearing capabilities and a quick turnaround time. This system is applied in a one coat application and is self sealing. SANITILE 5209 has excellent resistance to sulfuric acid up to 98%.

TYPICAL USES, APPLICATIONS

For surfacing new concrete or resurfacing floors or containment areas exposed to aggressive chemical attack in drum storage, heavy traffic and secondary containment areas. Not intended where aesthetics are a concern.

PRODUCT ADVANTAGES

Cures quickly to form an exceptionally tough, impact and abrasion resistant surface. Excellent adhesion to concrete and steel. Minimum down time. Skid-resistant, sanitary, and non-shrinking.

COLOR Brown / Red / Light Gray

CHEMICAL RESISTANCE

Excellent resistance to splash, spill and containment of most alkalis and acids, including 90 to 98% sulfuric acid. For specific chemical resistance, consult Carboline Technical Service Department.

PACKAGING

Primer

SEMSTONE 110 is packaged in 1.5 gallon units and consists of:

- (1) 1 gallon can of Part A
- (1) 1 gallon can of Part B (short filled)

Refer to Semstone 110 Product data sheet for mixing, application and curing instructions.

Floor Surfer

A "mini-kit" covers 16 ft² @1/4" and is supplied as:

- (1) can Part A - resin (0.32 gal each)
- (1) can Part B - hardener (0.25 gal each)
- (1) bag Part C - aggregate (30.94# each)

A "standard" unit (10 mini-kits) covers 160 ft² and is supplied as:

- (10) cans Part A - resin (0.32 gal each)
- (10) cans Part B - hardener (0.25 gal each)
- (10) bags Part C - aggregate (30.94 lbs each)

SANITILE 5209 is also available in ½ bulk and full-bulk units.

| | <u>½ Bulk</u> | <u>Full Bulk</u> |
|--------------------|---------------|------------------|
| Part A - resin | 21 gal | 42 gal |
| Part B - hardener | 16 gal | 33 gal |
| Part C – aggregate | 58 bags | 117 bags |

A ½ bulk unit will cover approximately 900 ft²
 A bulk unit of will cover approximately 1800 ft²

STORAGE TEMPERATURE

SANITILE 5209 should not be stored at temperatures below 25°F or higher than 85°F for at least 48 hours. Storage life is 12 months at 70°F. Prior to application, all components and equipment must be stored at 70 to 85°F for at least 48 hours to facilitate mixing and use.

PHYSICAL CHARACTERISTICS

| | |
|------------------------------------------------------|---------------------------------------------------|
| Compressive Strength | 10,000-11,000 psi (ASTM D-695) |
| Modulus of Elasticity | 1.062 x 10 ⁶ psi (ASTM D-695) |
| Tensile Strength | 750-1400 psi (ASTM D-638) |
| Flexural Strength | 2,800-3,600 psi (ASTM D-790) |
| Thermal Coefficient of Linear Expansion | 6.16 x 10 ⁻⁶ in./in.°F (ASTM D-696) |
| Solids | 100% |

SURFACE PREPARATION

New Concrete

New concrete must have a minimum of 28 days cure and no curing agents or sealers shall be used unless approved by Carboline Technical Service Department. Remove oil, grease or other loose or foreign materials and contaminants in accordance with ASTM D4258 "Standard Practice for Surface Cleaning Concrete for Coating".

A good bonding tooth, a texture of 40 to 60 grit sandpaper, is desired with the removal of all glaze. Prepare the surface using one of the following methods: sandblast with fine sand and reduced pressure; scarify, or rotary blast such as Blastrac®.

Old Concrete

Remove all powdery, weak concrete, paint, wax, oil, grease or other contaminants.

Once the concrete has been cleaned and neutralized, one of the following methods shall be used to provide a good bonding tooth, a surface with a texture of 40 to 60 grit sandpaper, with the removal of all glaze: sandblast with fine sand and reduced pressure, scarify, or rotary shot blast such as Blastrac®.

Note: Degree of contamination and intended service will determine degree of surface preparation. All surfaces must be dry before application.

Metal Surfaces

Degrease surface prior to sandblasting. Use organic solvents, alkaline solutions, steam, hot water with detergents or other systems that will completely remove dirt, oil, grease, etc.

Blast the surface to near white SSPC-SP10 or NACE No. 2 using a Venturi blast nozzle with 100 psi air. To produce the 4 mil minimum anchor pattern or "tooth", the blasting media used shall be a properly graded, clean, sharp angular abrasive similar to Humble Abrasive Flint S7 (6-30 mesh), Steel Grit (HG25) or BLACK BEAUTY® (BB1040).

SANITILE® 5209

APPLICATION TEMPERATURE

Do not apply when surface temperature is below 45°F. For application, the material must be 70-85°F.

MIXING

SEMSTONE 110 PRIMER

Mix Part A resin with Part B hardener until uniform in color and consistency.

Refer to Semstone 110 Product Data Sheet for mixing, application and curing instructions.

SANITILE 5209

Empty the contents of Part B into Part A and mix thoroughly. Then empty the mixture into a mixer, draining the can for about ½ minute. Start mixer and slowly add Part C and mix approximately 5 minutes.

Note: Person mixing should wear a dust mask or respirator.

Mixer

A mechanical mixer designed for quick, thorough mixing of aggregated epoxy coatings similar to those manufactured by:

KOL MIXAL

Division of Man U Fab, Inc.
Minneapolis, MN

Kenrich Products
Portland, OR

Important: The working life of the blend is 30 minutes. Always pour mixed batches as soon as blended. Mixed materials remaining in container will produce heat and may smoke.

**KEEP AWAY FROM COMBUSTIBLE MATERIALS.
DO NOT RESEAL CONTAINERS!**

APPLICATION

Application in direct sunlight and rising surface temperature may result in blistering of the materials due to expansion of entrapped air or moisture in the concrete. Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application and remain shaded until the initial set has taken place. When the surface temperatures are rising, it may be necessary to postpone the application or apply during the cooler evening hours.

As is common with all epoxies and novolacs, under certain conditions such as low temperature and high humidity, the Semstone 110 may develop an oily film on its surface known as a "blush". This blush should be removed by soap and water prior to topcoating.

SEMSTONE 110

Apply to prepared surface using a flat floor squeegee, paint roller, or brush. It is important to obtain the proper coverage and not allow the material to puddle in holes or depressions. Application of the appropriate Carboline overlayment must be completed BEFORE the primer hardens. If the primer hardens before the overlayment is applied, the area must be reprimed. The "open time" for Semstone 110 Primer is approximately 48 hours at 77°F/25°C.

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Pour the entire batch onto the surface in a ribbon approximately 10" wide. Spread with a clean steel trowel, applying pressure to spread thoroughly onto surface. Smooth the coating with the trowel holding it almost flat and applying light pressure. Finish each batch as you go. A quality 3"x10" cement finisher's trowel, such as Goldblatt or Marshalltown, is recommended.

EDGES

When possible, cut approximately ½" deep chase or groove into concrete. Chisel a shoulder to the saw cut back approximately 2" to 4". Trowel smooth to meet adjoining floor level. When the feather edge method is used, taper down to meet the adjoining floor level extending the feather edges 1" to 2" beyond overlay.

CURE TIME

SANITILE 5209 will harden within a few hours at 70°F. The warmer the temperature, the faster it cures. Allow to cure 24 hours for light traffic loads and 72 hours for heavy traffic loads and chemical spillage.

CLEAN UP

Cured or hardened SANITILE 5209 is very difficult to remove. Clean tools and equipment immediately with hot, soapy water or industrial solvent (Thinner #2).

SAFETY

READ THIS NOTICE

SAFETY AND MISCELLANEOUS EQUIPMENT

It is recommended that the operator provide himself with clean coveralls and rubber soled shoes and observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis.

THE CARBOLINE THINNER RECOMMENDED IN THIS COATING IS FLAMMABLE AND CARE AS DEMANDED BY GOOD PRACTICE, OSHA, STATE AND LOCAL SAFETY CODES, ETC. MUST BE FOLLOWED CLOSELY. Keep away from heat, sparks and open flame and use necessary safety equipment, such as, air mask, explosion-proof electrical equipment, non-sparking tools and ladders, etc. Avoid contact with skin and breathing of vapor or spray mist. When working in tanks, rooms and other enclosed spaces, adequate ventilation must be provided. Refer to Bulletin PA-3. Keep out of the reach of children.

CAUTION - Read and follow all caution statements on this product data sheet, material safety data sheet and container label for this product.

This product data sheet provides standard information on the coating and application procedure. Since varying conditions may not be covered, consult with your local sales representative or Carboline Technical Service Department for further information.



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